GENERAL BIOLOGY.

Filose Activity in Metazoan Eggs. — Any new facts that throw light upon the complicated problem of the relations to one another of the cells in an organism are exceedingly welcome. We note with pleasure, therefore, an article[1] by Prof. E. A. Andrews, giving a summary of his researches upon the formation of pseudopodia-like processes in metazoan eggs, to which Mrs. Andrews first clearly called attention in 1897.[2]

The filose processes are described as extremely fine protoplasmic threads arising from the surface of blastomeres in various stages of cleavage. They traverse the blastocœl, and frequently become attached to other blastomeres or to the polar bodies, which also give rise to similar processes. The threads may branch, and the protoplasm flowing along them may collect in nodules, especially at the points of origin of the branches.

These filose phenomena were observed in living eggs of a nudibranch mollusk, *Tergipes despectus* (?); a lamellibranch, *Yoldia limatula;* a nemertean, *Cerebratulus lacteus* Verrill; an annelid, Serpula; and echinoderms.

Among the Chordata, preserved material only was available. In sections of cleavage and larval stages of the salamander *Amblystoma punctatum*, and in certain frog's eggs, undoubted protoplasmic connections between the cells were observed, but their normal filose character was not certain. Eggs of Amphioxus in four, eight, and sixteen-cell stages showed marked intercellular connections. In the illustrations these are seen to be filaments of considerable length, extending across the cleavage cavity. Figures of the filose processes found in living and in preserved echinoderm eggs are introduced for comparison, and support the view that the filaments in the egg of Amphioxus are of the same character.

If the filose phenomena are as widely distributed throughout the animal kingdom as this paper would lead one to suppose, they will become surely an important factor in future theories of ontogeny.

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A Plea for the Theory of Special Creation. — While the methods of evolution still furnish matter for discussion, one might suppose

[1] Andrews, E. A. Filose Activity in Metazoan Eggs, *Zoological Bulletin*, vol. ii (July, 1898), No. 1, pp. 1–13.

[2] *Journ. of Morph.*, vol. xii, No. 2.